

Claims

- [1] A drug administration support system comprising:
storing means for storing blood filtering information, biological information and drug information;
calculating means for calculating a total clearance of the drug with due consideration paid to the renal function failure and blood filtering on the basis of the blood filtering information, biological information, and drug information; and
displaying means for displaying the obtained total clearance.
- [2] A drug administration support system as claimed in claim 1, wherein said calculating means calculates the total clearance of the drug by the following formula:
$$CL_t = k \times CL_{cr} + (1 - T/100) \times Q_w \times (1 - f/100) + CL_a$$

where CL_t (ml/min) represents a total clearance during the blood filtering, k and T are constants different for individual drugs, k represents a coefficient for converting from the creatinine clearance to the drug clearance, T represents a protein binding rate of the drug, Q_w (ml/min) is the set value in the blood filtering, CL_{cr} (ml/min) represents a renal creatinine clearance, f represents a filter clogging removal efficiency reduction index, and CL_a (ml/min) represents a clearance of absorbing the drug to the blood filter.
- [3] A drug administration support system as claimed in claim 2, wherein the renal creatinine clearance is calculated from a serum creatinine concentration by the following formula:
$$CL_{cr} = [BW \times (140 - Y) / (72 \times Cr)] \times M$$

where BW (kg) represents body weight, Y (y.o.) represents an age, Cr (mg/dl) represents a serum creatinine concentration, and M (mg/dl) represents a coefficient (male:1, female:0.85).
- [4] A drug administration support system as claimed in any one of claims 1 to 3, wherein the total clearance of the drug is the sum of the renal clearance of the drug and the blood filtering clearance of the drug.
- [5] A drug administration support system as claimed in any one of claims 1 to 4, wherein said displaying means displays a guideline by a level bar as the indication of the renal creatinine clearance.
- [6] A drug administration support system as claimed in any one of claims 1 to 5, wherein said drug is the renal secretion drug.
- [7] A program operable in a computer, the program comprising the steps of:
extracting stored blood filtering information, biological information and drug information from a memory; and

calculating a total clearance of the drug with due consideration paid to the renal function failure and blood filtering on the basis of the blood filtering information, biological information, and drug information.